

# Industrial Standby batteries

A wide offer of reliable, long-life solutions



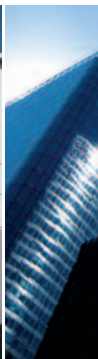
[norwatt@norwatt.es](mailto:norwatt@norwatt.es)

[www.norwatt.es](http://www.norwatt.es)



**SAFT**

# Saft stationary batteries, solutions you can count on



By providing a large choice of technologies and cell configurations as well as a complete range of low, medium and high rate characteristics, our wide offer means you have the stationary battery that is perfectly suited to your application. Saft Industrial Standby batteries offer you the peace of mind of knowing that they will work when you need them to work, for more than 20 years, in challenging conditions, with minimum or no maintenance<sup>(1)</sup>.

## Always ready when you need them

Stationary batteries are used in refineries, power plants, onshore & offshore oil & gas industries, substations, airports & building infrastructure – locations where it is absolutely critical to have batteries that will work when they should. Saft's Industrial Standby batteries provide just that sort of extremely reliable backup power, starting power and cycling applications for a variety of industrial applications.

<sup>(1)</sup> The term maintenance free means that no addition of water is necessary during the life time of the product when operating under Saft's recommended conditions.

## Minimum maintenance – or none at all

Our broad range of products varies from traditional cells that require only minimum regular maintenance to our newest generation of batteries that are maintenance-free<sup>(1)</sup>, with no need to add water.

## A long life even in difficult conditions

Saft stationary batteries have a long life of more than 20 years under ambient temperatures. Even in harsh environments and extremely hot or cold climates, Saft Ni-Cd stationary batteries still offer an outstanding service life as compared conventional or traditional batteries.



## Consider the Total Cost of Ownership when you choose

Only the Total Cost of Ownership (TCO) represents the true value of owning a battery. That's why Saft stationary batteries are designed to provide the ideal combination of high performance, maximum reliability, long life and efficient operation.

Beyond just the one-time purchase cost, consider maintenance needs, service intervals and—perhaps most importantly—life expectancy when you choose stationary batteries.

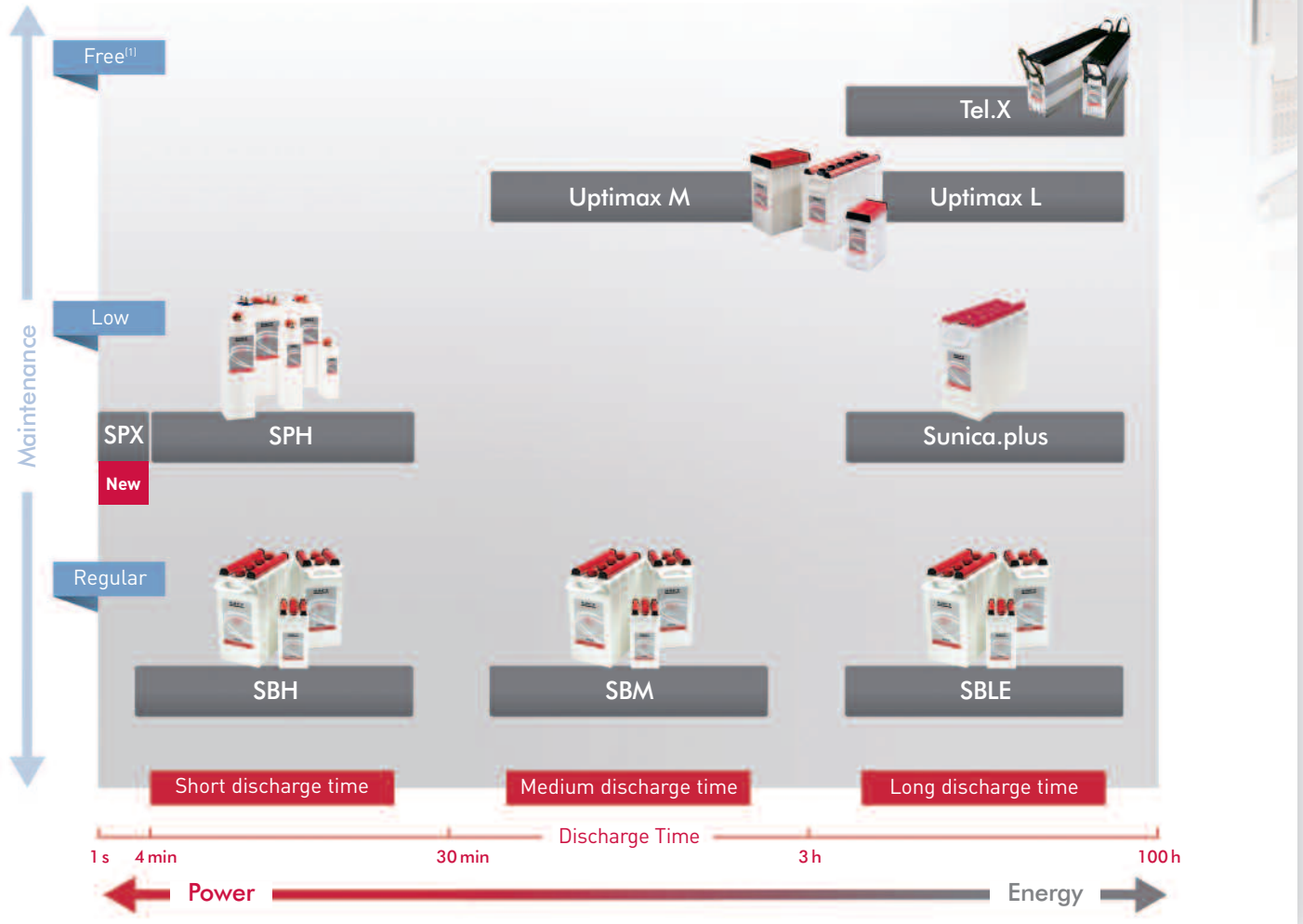
Your installation will last more than five years. Your batteries should, too.



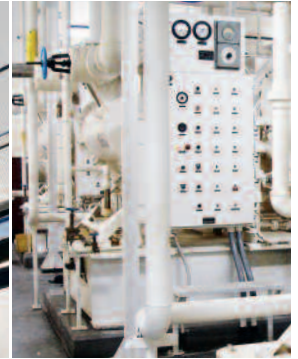
## Stationary batteries from a world leader

Saft has unequalled experience and expertise in designing, developing and manufacturing robust and reliable batteries. Because we supervise the entire end-to-end value chain of our batteries, we can be sure of their safety and their quality.

Our large offer means you can find a Saft Ni-Cd stationary battery that is right for your needs.



# The right solution, no matter what your application



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## BACKUP

### Reliable and robust batteries for backup power

Power is absolutely vital to Uninterruptible Power Supply (UPS) systems, switching and transmission functions, emergency and security systems, industrial fire monitors and alarms, data centers, process control installations, signaling systems and more.

If the primary source of power for applications such as these is suddenly unavailable, a backup system provides a temporary source of power until primary power re-engages or while systems operators perform a proper shutdown. But backup power is only as good as the stationary battery that enables it.

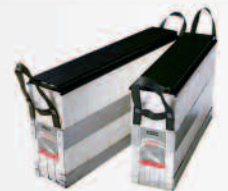
### Uptimax New Generation batteries for a maintenance-free<sup>(1)</sup> solution

Uptimax New Generation is our maintenance-free<sup>(1)</sup>, highly reliable Saft Nife® Ni-Cd pocket plate technology power back-up solution for high temperature conditions. It is particularly well suited for use in the oil and gas, utility and electricity industries. With efficient gas recombination, its recommended operating instructions do not call for topping-up with water. It offers maximum performance for a minimal Total Cost of Ownership (TCO).



### Tel.X maintenance-free<sup>(1)</sup> batteries for railroad signaling and offshore applications

Ideally suited for trackside communication applications, the Tel.X Ni-Cd battery reaches an outstanding 100 Wh/L and 30% lighter weight than VRLA battery. Tel.X is a compact high-energy, long-life and maintenance-free<sup>(1)</sup> alternative to VRLA batteries in floating applications. It is easy to install and its long service life provides an optimum Total Cost of Ownership (TCO).



### SBLE, SBM and SBH for a long reliable life

Our SBLE, SBM and SBH block batteries are the optimum solution for all discharge characteristics. Built with reliable Ni-Cd pocket plate technology from Saft Nife®, they function over a wide range of temperatures, resist electrical abuse, shock and vibrations, need only basic maintenance and offer a low Total Cost of Ownership (TCO) over a life cycle that can last 20 years or more.



<sup>(1)</sup> The term maintenance free means that no addition of water is necessary during the life time of the product when operating under Saft's recommended conditions.

**STARTING**

**Instant emergency power to start**

Standby power plant must be instantly available in case of emergencies. This is particularly important when the application is mission critical, such as for process plant where a loss of production can have important economic impact or for a hospital where lives can be at risk.

NEW

**SPX: the world's most powerful Ni-Cd battery for engine cranking**

SPX cutting-edge Ni-Cd battery range is ideally suited for engine starting applications requiring high reliability, long cranking time, high or low temperature operation and long calendar life.

Certified to IEC 60623 'X' extra-high power, it delivers the most amperes per Ah capacity, ensuring that any generator will start in all conditions. Moreover, with a reduced footprint, it enables smaller installations and lower environmental impact.




**CYCLING**

**Ready for challenging off-grid photovoltaic conditions**

Faced with the complex charge/discharge cycling patterns imposed by the unpredictability of the weather, the high cycling capabilities of Saft battery systems provide reliable power for solar and other stand-alone sites, even in remote locations and harsh environments.

**Sunica.plus for renewable off-grid photovoltaic applications**

Saft Sunica.plus uses Saft Nife® Ni-Cd low maintenance pocket plate technology to achieve 10 000 cycles at 15% depth of discharge in temperatures from - 50°C (- 58°F) to + 70°C (+ 158°F). Saft operates at any state of charge without corrosion or sulphatation.



Adapted to your sector's unique needs



**Buildings & Plants**

Hospitals, plants, data centers, telecom installations, large public buildings, mission critical facilities, banks

**Oil & Gas**

Offshore platforms, onshore production sites, pipelines, upstream and downstream facilities, remote locations

**Off-grid photovoltaics**

PV, off-grid installations, pipelines, hybrid systems

**Transport infrastructures**

Rail, road, marine buoys, aviation beacons, tunnels, signaling, generators

**Utilities**

Electricity generation, gas turbine plants, T&D substations, desalination plants

# The technology that meets your needs

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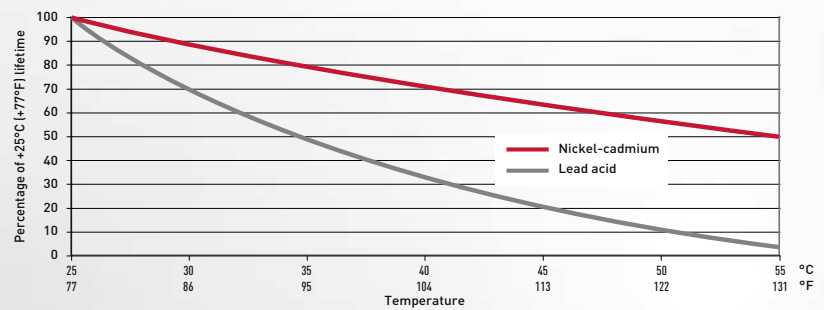
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## Ni-Cd for durable batteries with a long life

Saft nickel cadmium (Ni-Cd) batteries offer exceptional performance in a robust steel structure. Unlike lead batteries, which deteriorate rapidly especially at high temperatures or difficult operating conditions, our Ni-Cd batteries are known for their physical strength, and long life, qualities that are very important in applications where the consequences of a battery's "sudden death" are unacceptable.

Effect of temperature on lifetime



## Li-ion for specific high energy and high power requirements

For applications requiring lighter, more compact battery systems such as UPS, Saft can now deliver extremely long life, reliable, maintenance-free lithium-ion (Li-ion) battery configurations to meet your new needs and new applications. Today, this kind of technology operates subsea Christmas trees and UPS. Saft Li-ion batteries deliver high energy density, high power (both in charge and discharge) and excellent cycling capabilities.

## Intensium Flex Li-ion systems for power and space-tight UPS requirements

Designed to meet high power and energy requirements, Intensium Flex is based on 24 V or 48 V compact modules, available in high power, medium power or high energy. Intensium Flex systems are delivered in a 19-inch rack mount format, up to 1000 V configurations, integrating Saft's Battery Management Module, safety and communication functions.



# So much more than just batteries

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## End-to-end service and support

Saft's stationary battery experts are skilled and experienced at resolving the individual needs of our customers around the world. We provide battery sizing advice, comprehensive after-sales installation support, a range of maintenance services and a series of training courses.

## Size it yourself

Our Battery Sizing and Configuration System, known as BaSics, helps customers to quickly find the right Saft Ni-cd battery for their backup, starting, or photovoltaic applications. BaSics offers a layout to define one or several stands as well as the battery layout itself. To obtain your personal login and password, contact your usual Saft representative and then download BaSics on our website.

## Install and maintain your Saft batteries

Thanks to our training courses, your technicians and engineers can properly install and maintain Saft batteries themselves. Courses cover basic and advanced skills, with a special focus on installation and maintenance guidelines and standards to ensure maximum performance and reliability from your power systems.

Saft's training courses include both theory and hands-on practice.

To better support its customers for commissioning, diagnostic, maintenance and after-sales activities, Saft continues to enhance its network of approved service stations in the Middle East, Asia and North America.

Visit [www.saftbatteries.com](http://www.saftbatteries.com) for the contact details of the Saft service station near you.



Saft Industrial Standby batteries are in full conformity with a range of globally recognized quality, safety and environmental standards.

**Quality:** ISO 9001 / ISO 14001 / Saft World Class program

**Environment:** Fully recyclable

**RoHS:** Although batteries and accumulators are not within the scope of the RoHS directive, Saft has taken voluntary measures to make sure that the substances forbidden by RoHS are not present in the battery, with the exception of the electro-chemical core.

**Reach:** The Saft Group has adopted internal procedures to ensure conformity with the European Regulation Reach.



# Saft is committed to the highest standards of environmental stewardship

As part of its environmental commitment, Saft gives priority to recycled raw materials over virgin raw materials, reduces its plants' air and water releases year after year, minimizes water usage, reduces fossil energy consumption and associated CO<sub>2</sub> emissions, and ensures that its customers have recycling solutions for their spent batteries.

Regarding industrial nickel-based batteries, Saft has had partnerships for many years with collection companies in most EU countries. This collection network receives and dispatches our customers' batteries at the end of their lives to fully approved recycling facilities, in compliance with the laws governing trans boundary waste shipments.

This collection network meets the requirements of the EU batteries directive. A list of our collection points is available on our web site. In other countries, Saft assists users of its batteries in finding environmentally sound recycling solutions. Please contact your sales representative for further information.

[norwatt@norwatt.es](mailto:norwatt@norwatt.es)

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